38. The Superintendent, Forest Surveys, states that the cost rates are, as usual, calculated from the totals of the *survey year* ending 30th September 1895, because the totals thus obtained correctly represent the actual cost of each Survey and its subsequent mapping during the recess; whereas if the total of the forest year were taken, it would represent the cost of one survey season, and the mapping of the surveys of the previous survey season of a totally different locality; and as the total expenditure for the survey year, Rs. 27,712, does not widely differ from the total expenditure of the forest year, Rs. 27,136, the cost rates are not materially affected.

39. The following statement shows a comparison of the outturn and cost of the forest surveys undertaken during the survey years 1893-94 and 1894-95 :—

Year.	Triangulation.		Detailed Survey.						Rate per Square mile.		
			4″ Scale.		8″ Scale.		16″ Scale.				
	Area.	Cost.	Area.	Cost.	Area.	Cost.	Area.	Cost.	4″.	8″.	16″.
	Sq.miles.	Rs.	Sq.miles.	Rs.	Sq.miles.	Rs.	Sq.miles.	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1893-94 ...	200	1,192	8·60	727	112·85	15,214	65·0	11,662	84 9 3	134 13 7	179 6 7
1894-95 ...	...	...	159·35	12,918	113·03	11,970	24·24	2,824	81 1 4	110 3 7	116 7 3

40. The Forest Survey Party No. 17 of the Government of India, in addition to undertaking the surveys of forest reserves for the Forest Department, surveys and maps for the standard topographical sheets of the Survey of the Indian Empire, which are published on the scale of 1 inch equal to 1 mile, country outside forest reservations in the Kánara district as well as the country covered by forest areas, but the entire cost of the survey party for the whole year is charged to the Forest Department, and no fraction of it is charged to the Government of India in the Topographical Survey Department on account of the topographical survey work done by the party in Kánara. In order to arrive at the rates of cost of different forest surveys on different scales, to the actual cost of the field and mapping work is added a proportionate share of the cost of supervision, *i. e.* of the Superintendent's pay, &c., and of the head-quarters charges of No. 17 party. But if the actual cost of the topographical survey work performed by the party in Kánara were to be deducted from the amount now charged to the Forest Department on account of forest surveys, and if its proportionate share of supervision and of head-quarters charges were to be deducted also, and were to be added to the cost of the topographical survey in Kánara, then the rates for the survey work in the three circles on the different scales of 16,″ 8″ and 4″ equal to one mile would be lower than the Superintendent of Forest Survey shows them to have been, and the figures would consequently represent more correctly the actual or real cost of forest surveys.

CHAPTER II.

MANAGEMENT OF STATE FORESTS.

I.—REGULATION OF MANAGEMENT.

(*a*).—Working Plans and their Control.

41. The newly created Working Plans Division for the Central Circle was in charge of Mr. L. S. Osmaston, Deputy Conservator of Forests, 4th Grade, sub. *pro-tem.* throughout the year, whose operations were confined to the divisions of East Khándesh, Násik, Ahmednagar and Poona.

42. The field establishment which was not brought up to its full strength before the 1st January 1895, laid out 272 compartments on the ground at a cost of Rs. 516 during the working season: of these 272 compartments 45 with an acreage of 148·7 represent the Bábool compartments in the Poona divi-

sion; 42 with an acreage of 3,735·205 in the divisions of East Khándesh and Násik constitute the number to be worked during 1895-96; and 185 with an acreage of 17,868·3 in the same divisions to be worked after 1895-96. 506 cairns and 1,149 mounds were erected to define the limits of these compartments.

43. Working Plans for the ranges of Bhadgaon in the East Khándesh division and of Sangamner in the Ahmednagar division have been completed and submitted to the Conservator, and of Chálisgaon and Akola ranges are under preparation and will be submitted shortly.

44. In addition to the 272 compartments laid out by the surveyors of the Working Plans division, the staff of the several Divisional Forest Officers in the Central Circle laid out 161 compartments; and the details showing the area of these compartments and the expenditure incurred are given in the following statement:—

No.	Division.	Number of Compartments.	Area of Compartments.		Cost of Demarcation.		Number of Cairns erected.	Remarks.
			Total.	Average.	Total.	Average.		
			A. g.	A. g.	Rs. a. p.	Rs. a. p.		
1	East Khándesh	18	1,703 35	94 26	44 12 1	2 7 9	130	
2	West Khándesh	31	7,765 0	250 19	85 0 0	2 11 1	108	
3	Násik	4	331 30	82 37	9 7 0	2 5 9	126	
4	Ahmednagar	45	2,444 31	54 13	11 14 3	0 4 3	...	
5	Poona	26	1,129 23	43 18	164 3 6	6 5 1	339	
6	Sátára	17	986 34	58 2	72 0 0	4 3 9	48	
7	Sholápur	20	935 35	46 32	2 8 0	0 2 0	...	
	Total ...	161	15,297 31	95 1	389 12 10	2 6 9	751	

45. The figures given in the statement below will show the proportion of forests which have been blocked and are under systematic management:—

No.	Division.	Forest Area.	Area differentiated up to the end of 1894-95.	Area still remaining.	Percentage of Forest under detailed treatment.
		Sq. m. Acres.	Sq. m. Acres.	Sq. m. Acres.	
1	East Khándesh ...	807 211	171 0	636 211	21·19
2	West Khándesh ...	1,722 22	89 0	1,633 22	5·11
3	Násik	1,279 380	235 0	1,044 380	18·37
4	Ahmednagar	847 295	178 0	669 295	21·01
5	Poona	711 244	196 0	515 244	27·56
6	Sátára	671 497	84 0	587 497	12·52
7	Sholápur	277 613	197 0	80 613	70·86
	Total ...	6,317 342	1,150 0	5,167 342	18·2

(*b*).—Annual Plans of Operations.

46. A plan of operations for each division in the Central Circle was drawn up as usual by each Divisional Forest Officer in conformity with the sanctioned figures of the Budget Estimates of the year, and was approved and acted upon.

II.—WORKING OF THE YEAR.

(*a*).—Communications and Buildings.

(*1*).—*Roads.*

47. In the Khándesh Collectorate the Jakria-bári Ghát road which was in progress last year has been completed by the Public Works Department and

opened to traffic; the total expenditure during 1894-95 amounting to Rs. 6,691. This road will facilitate the timber traffic from the Dángs. The survey of a road from Warsa to Waghai is also in progress, and Rs. 203 were spent up to the end of the year. The Divisional Forest Officer, East Khándesh, spent Rs. 141 in improving cart-tracks with a view to make the coupes of the year accessible to heavy loaded carts; and the Divisional Forest Officer, West Khándesh, spent Rs. 35 in repairing the Kalambari forest road in the Pimpalner range in order that intending purchasers of departmentally cut teak might be able to remove their material more easily.

No new roads were undertaken by the Public Works Department in the Násik division, but the Divisional Forest Officer reports that a correspondence is going on between the Collector and the Public Works Department to continue the Nanási Barhe road to the Dharampor frontier, with a fork to the Surgána State, to connect Peint directly with Nanáshi; and to construct a road through the Kalvan Táluka to Hátgad tapping the western forests in that táluka. All these proposed roads will benefit forests directly and indirectly.

The two roads referred to last year in the Ahmednagar division, *viz.*, from Jámgaon to Kotul and from Randhá to Sámrad, were in progress during the year and have been practically completed, the expenditure during 1894-95 amounting to Rs. 815 and Rs. 1,470 respectively, and the total expenditure up to the end of the year amounting to Rs. 28,695 and Rs. 30,133.

In the divisions of Poona, Sátára and Sholápur no new roads which will serve for the exploitation of timber from forests have been constructed by the Public Works Department.

(*2*).—*Buildings.*

48. The following works were undertaken by the Public Works Department for the Forest Department at the cost of the Provincial Services Budget:—

In the Khándesh Collectorate—

(*a*). The Forest Depôt at Kondai-bári which was partially built last year has been completed; the expenditure amounting to Rs. 301.

(*b*). Forest Depôts at Chopda and Ádávad are under construction; the expenditure amounting to Rs. 1,110 and Rs. 697 respectively.

(*c*). A seed room in the Range Forest Office at Chálisgaon is being built; the expenditure amounting to Rs. 31.

In the Násik division a room was added to the Divisional Forest Officer's office at Násik at a cost of Rs. 965 against an estimate of Rs. 986: and the following projects are being prepared:—

(1). Forest Depôt at Chinchvad in Peint Range.

(2). Providing a record-stand in the Range Forest Office at Dindori.

(3). Making additions and alterations to do. do.

No buildings were undertaken in the divisions of Ahmednagar, Poona and Sholápur; but the following works were undertaken and completed in the Sátára division.—

(1). An office for the Range Forest Officer at Pátan at an expenditure of Rs. 1,942 against an estimate of Rs. 1,947.

(2). Hirda Depôt at Helwak which was under construction last year was completed at a cost of Rs. 1,596.

In addition to the above the following works were undertaken by the Public Works Department under the sanction given by the Conservator of Forests from the discretionary grant placed at his disposal by Government, from 1st July 1894 to 30th June 1895:—

Number.	Executive Officer.	Nature and locality of Work.	Amount sanctioned.
			Rs.
1	Executive Engineer, Khándesh ...	For providing concrete floor to the Range Forest Officer's room in the Mámlatdár's Kacheri at Taloda.	25
2	Do. do ...	For providing teak-wood bonnets to the windows of the Range Forest Office, Ráver.	16
3	Do. do. ...	For providing a pit for the treasure chest in the Forest Depôt at Chopda.	75
4	Do. do. ...	For providing a seed room in the Range Forest Office at Bhadgaon.	314
5	Do. do. ...	For providing a seed room in the Range Forest Office at Bhusával.	311
6	Do. Poona ...	For making certain improvements to the Forest Ranger's Office at Khed.	120
7	Do. do. ...	For making certain improvements to the Forest Ranger's Office at Sirúr.	123
8	Do. Sátára ...	For providing a ceiling to the Range Forest Office at Tásgaon.	23
9	Do. do. ...	For making certain additions to the Forest Hirda depôt at Mahábaleshvar.	138
10	Do. do. ...	For erecting a sunshade over window in the new Range Forest Office at Vaduj.	9
11	Do. do. ...	For reconstructing the stables of the Forest Station at Málcolmpeth.	210
12	Do. Sholápur ...	For providing a wooden railing to the verandah of forest room in the Mámlatdár's kacheri at Sholápur.	59
13	Do. do. ...	For providing wooden shutters to the windows of the Range Forest Office at Pandharpur.	10
14	Do. do. ...	For constructing wells for seeds in the Range Forest Offices at Sholápur and Pandharpur.	205
15	Do. do. ...	For constructing wells for seeds in the Range Forest Office at Sángola.	110
16	Do. do. ...	For paving the Forest Office rooms at Sholápur.	185
		Total ...	1,933

49. And the following works were undertaken at the cost of Forest Budget by the Divisional Forest Officers :—

In the East Khándesh division the construction of a Forest Rest-House at Vaizapur on the Aner in the Chopda Sátpudás was commenced, but the building was not completed at the close of the year owing to the great difficulty of obtaining skilled labourers and artisans to come and work in these wild tracts: Rs. 1,574 were however expended out of the estimate of Rs. 1,990. This rest-house is the first of a series to be built in the Sátpudás from Pál to Chopda to facilitate touring and inspection of forests in the wild mountainous region forming the northern frontier of Khándesh. 11 Forest guards' huts were built at a cost of Rs. 193, and an expenditure of Rs. 131 was incurred in repairing the existing huts and depôt-houses; the total expenditure under A VII*b* "Buildings" amounting to Rs. 1,898.

In the West Khándesh division an office and record rooms were built in the compound of the Dhulia Depôt for the use of the Range Forest Officer at a cost of Rs. 457, and repairs to 53 Forest guards' huts and 10 forest depôt-houses throughout the division cost Rs. 443; while the double-tiling to the roof and other repairs to the Laling Rest-House cost Rs. 123.

In the Násik division no new work was undertaken except three Forest guards' huts, one in Niphád, one in Kalvan and one in Nándgaon range, at a cost of Rs. 5 each, and 15 existing huts were repaired at an expenditure of Rs. 31.

In the divisions of Ahmednagar and Sholápur no expenditure was incurred on either buildings or repairs : and in the Poona and Sátára divisions Rs. 14 and Rs. 94 were spent on repairs to existing Forest guards' huts, &c.

50. The following statement exhibits the amounts charged to forests on account of the expenditure incurred by the several Divisional Forest Officers in the Central Circle in the construction of new roads and buildings and repairs to existing ones :—

Number.	Division.	Amount.	Remarks.
		Rs.	
1	East Khándesh	2,039	
2	West Khándesh	1,058	
3	Násik	46	
4	Ahmednagar	...	
5	Poona	14	
6	Sátára	94	
7	Sholápur	...	
	Total ...	3,251	

(*b*).—Protection of Forests from Injury.

(*1*).—*General Protection and Breaches of Forest Law.*

51. The prosecutions of forest offences instituted during the year numbered 1,972 against 1,658 of the year before. 1,716 cases involving 4,381 persons were disposed of, and 256 cases were pending at the close of the year. Convictions were obtained in 1,375 cases leading to the punishment of 3,359 persons, and 1,022 accused were acquitted in 341 cases which failed.

52. A comparative statement of the prosecutions of the year and of its predecessor gives the following information :—

No.	Division.	1893-94.		1894-95.		Percentage of Failures.	
		Prosecutions.	Acquittals.	Prosecutions.	Acquittals.	1893-94.	1894-95.
1	East Khándesh	62	8	150	26	12·9	17·3
2	West Khándesh	78	3	88	5	3·8	5·6
3	Násik	87	28	62	16	32·2	25·8
4	Ahmednagar	219	43	272	55	19·6	20·2
5	Poona	492	131	302	109	26·6	36·0
6	Sátára	441	56	767	109	12·6	14·2
7	Sholápur	58	26	75	21	44·8	28·0
	Total ...	1,437	295	1,716	341	20·5	19·8

A classification of the prosecuted cases evolves the following :—

No.	Division.	Offences relating to the misappropriation of				Total.
		(*a*) Timber.	(*b*) Firewood.	(*c*) Other minor produce.	(*d*) Other offences.	
1	East Khándesh	6	44	...	100	150
2	West Khándesh	34	16	4	34	88
3	Násik	6	21	...	35	62
4	Ahmednagar	2	15	37	218	272
5	Poona	21	26	14	241	302
6	Sátára	75	128	11	553	767
7	Sholápur	...	25	...	50	75
	Total ...	144	275	66	1,231	1,716

The increase in the numbers of East Khándesh division is due to the prosecution of owners of cattle who have persisted in illicitly grazing their animals, regardless of warnings previously given to them, to the detection of more offenders in stealing wood from reserved forests, and to the apprehension of smugglers bringing timber from foreign territory and attempting to evade the payment of duty upon it. The percentage of failures has slightly increased. The punishments awarded in the convicted cases were generally adequate.

The West Khándesh division exhibits too small an increase to require any special explanation; in 1892-93 there were 80 prosecutions in this division.

The number of prosecutions and the percentage of acquittals in the Násik division have decreased, but the proportion of failures is still very high: "want of proof" was the reason given. In one case the accused fled into the Nizám's territory.

The prosecution of offenders for deliberate cattle trespass after repeated warnings sent up the tale of prosecutions in the Ahmednagar division; about one-fifth of the cases failed for want of sufficient proof.

In the Poona division the prosecutions were chiefly for repeated illicit grazing. The percentage of failures has risen from 26·6 to 36·0 and this is attributed to the difficulty of proving to the satisfaction of the Magistrate, illicit grazing; and to several cases of setting fire to forests having been let off by the Magistrates of Mával and Mulshi on the grounds that as the forests were not directly fired but fire was communicated from ráb-beds outside the forest boundaries owing to burning material having been carried over by the high winds prevailing at the time, there was no offence committed under the Forest Act. Some extensive thefts of teak and other timber were detected in the Bibi forests of the Khed range and the Girávli forest of the Ambegaon range, and fitting punishment was awarded on the conviction of the offenders.

In the Sátára division the large increase is attributed to many cases of illicit grazing having been sent up to the Magistrates instead of being compounded.

The same cause led to a great number of prosecutions in the Sholápur division: it is satisfactory to note that the percentage of failures has fallen from 44·8 to 28·0.

53. Rewards were paid to the officers and informers through whose instrumentality conviction was obtained in the cases tried by Magistrates, in accordance with the rules published in Notification No. 5537 dated 18th October 1879, under section 75 of the Indian Forest Act, which direct the payment of one-half of the proceeds of fines and confiscations in all cases under the Act, and of a larger amount than one-half when the trying Magistrate considers it desirable that a greater reward should be given:—

No.	Division.	Amount of reward.	Remarks.
		Rs.	
1	East Khándesh	254	
2	West Khándesh	305	
3	Násik...	83	
4	Ahmednagar...	457	
5	Poona	584	
6	Sátára	2,589	
7	Sholápur	213	
	Total ...	4,485	

54. The number of cases compounded came to 1,458 against 926 in the year before; and the sums of money accepted by way of compensation for the forest offences amounted to Rs. 5,041 against Rs. 1,790 during 1893-94.

The following statement gives a comparison between the figures of the two years :—

No.	Division.	1893-94.		1894-95.	
		Cases.	Compensation.	Cases.	Compensation.
		No.	Rs.	No.	Rs.
1	East Khándesh	85	90	146	166
2	West Khándesh	4	22	221	713
3	Násik	94	333	271	705
4	Ahmednagar	369	607	50	99
5	Poona	195	620	736	3,293
6	Sátára	83	61	10	13
7	Sholápur	96	57	24	52
	Total ...	926	1,790	1,458	5,041

The classification of the compounded cases is as under :—

No.	Division.	Offences relating to				Total.
		(a) Timber.	(b) Firewood.	(c) Other Minor Produce.	(d) Other Offences.	
1	East Khándesh	2	97	7	40	146
2	West Khándesh... ...	33	47	45	96	221
3	Násik	53	147	38	33	271
4	Ahmednagar	17	30	1	2	50
5	Poona	34	110	11	581	736
6	Sátára	1	4	...	5	10
7	Sholápur...	...	9	...	15	24
	Total ...	140	444	102	772	1,458

The number of cases compounded has increased in the two Khándesh divisions. Detected cases of smuggling with the attempt to evade the payment of duty on timber brought from the neighbouring Native States, and deliberate instances of cattle-trespass, and minor thefts of wood have contributed to this result.

In the Násik division Section 67 was freely applied to detected forest offences of lesser gravity.

On the other hand in the Ahmednagar division there has been a decrease in the number of cases compounded, and the Divisional Forest Officer, Mr. Hornidge, explains this by stating that offences other than of cattle-trespass were only treated under Section 67.

In the Poona division the number of compounded cases exceeded that of the preceding year by 541; and the reason for this is that offences of lesser gravity were settled out of court. Of the 736 cases 578 were on account of illicit grazing in which the offenders were caught in the act of grazing cattle in defiance of the law. Compensation was fixed generally with regard to the rate of fees payable per animal under the grazing rules, double the amount of fees being accepted if the offence was committed at night, or if the cattle were found inside exploited coupes or in plantations.

In the divisions of Sátára and Sholápur the powers under Section 67 have been used to a very small extent; cases of cattle-trespass being sent up for trial by Magistrates.

55. The following statement shows the classification of the sums of money offered and accepted by the Divisional Forest Officer under section 67 in amounts of rupee one and upwards to the maximum permitted by law, as directed in Government Resolution No. 1899, dated 13th March 1891, in the Revenue Department:—

No.	Division.	Number of cases in which compensation was fixed at Rupees																								
		Re. 1 and under.	Rs. 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	East Khándesh ...	110	12	10	5	3	1	3	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
2	West Khándesh...	128	37	12	8	8	3	3	3	3	2	1	1	1	1	...	1	...	1	...	...	...	2	...	...	2
3	Násik	137	61	19	16	13	2	4	4	1	6	...	1	...	...	...	...	...	3	...	2	...	...	...	...	...
4	Ahmednagar ...	25	14	3	3	2	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
5	Poona	167	157	94	67	65	27	27	29	21	22	9	11	6	3	5	2	2	1	3	5	1	1	1	...	3
6	Sátára	5	4	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	Sholápur... ...	11	4	...	4	1	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	583	289	138	104	92	38	37	37	25	31	10	13	7	4	5	3	2	5	3	8	2	3	1	...	5

No.	Division.	Number of cases in which compensation was fixed at Rupees																								Total.
		Rs. 26 and under.	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
1	East Khándesh ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	146
2	West Khándesh...	1	1	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	221
3	Násik	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	271
4	Ahmednagar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	50
5	Poona	1	1	...	1	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1	736
6	Sátára	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
7	Sholápur... ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24
	Total ...	2	2	...	1	1	...	1	1	...	...	...	...	1	...	...	...	...	...	1	...	...	1	...	...	2	1,458

56. All sums of money accepted by way of compensation by Forest Officers in the several divisions of the Central Circle under Section 67 of the Forest Act and received during the year were credited in full to Forests under "Receipts" *V.c*, in accordance with the system of classification of forest accounts, without any deduction having been made in respect of any rewards which may have been given to persons who may have contributed to the detection of the offenders in cases compounded.

57. The following statement exhibits the number of cases compounded and the number of cases in which rewards were paid, together with the amount of rewards, by Divisional Forest Officers, in exercise of the powers vested in them by Government Resolution No. 8568, dated 16th December 1887, in the Revenue Department, to persons who had contributed to the detection of these cases:—

No.	Divisions.	Number of Cases compounded.	Number of Cases in which Rewards were paid.	Amount of Rewards.
				Rs.
1	East Khandesh	146	.....	.....
2	West Khándesh	221	.....	.....
3	Nasik	271	.....	.....
4	Ahmednagar	50	.....	.....
5	Poona	736	321	410
6	Sátára	10	.....	.....
7	Sholápur	24	.....	.....
	Total ...	1,458	321	410

58. And the following statement shows the number of cases sent up to the Divisional Forest Officers for consideration under Section 67 of the Forest Act and their subsequent disposal, as directed in paragraph 11 of Government Resolution No. 1899, dated 13th March 1891, in the Revenue Department :—

No.	Division.	Number of cases sent up to the Divisional Forest Officer.	Number of cases disposed of under Section 67.	Number of cases let off with a warning.	Number of appeals against the proceedings.	Manner in which appeals have been disposed of.	Remarks.
1	2	3	4	5	6	7	8
1	East Khándesh ...	497	146	351	...	...	
2	West Khándesh ..	277	221	56	...	...	
3	Násik	1,192	271	921	...	...	
4	Ahmednagar	2,572	50	2,522	...	...	
5	Poona	2,556	736	1,820	...	...	
6	Sátára	2,904	10	2,894	...	...	
7	Sholápur	1,809	24	1,785	...	...	
	Total ...	11,807	1,458	10,349	...	...	

59. The following statement gives the details of cases prosecuted and compounded by the several Divisional Forest Officers under Section 67 of the Forest Act during the year under report and in the preceding year, as directed in Government Resolution No. 3527, dated 2nd May 1884, in the Revenue Department :—

No.	Division.	Taken into Court.		Compounded.		Total number of cases.	
		1893-94.	1894-95.	1893-94.	1894-95.	1893-94.	1894-95.
1	East Khándesh ...	62	150	85	146	147	296
2	West Khándesh ...	78	88	4	221	82	309
3	Násik	87	62	94	271	181	333
4	Ahmednagar	219	272	369	50	588	322
5	Poona	492	302	195	736	687	1,038
6	Sátára	441	767	83	10	524	777
7	Sholápur	58	75	96	24	154	99
	Total ...	1,437	1,716	926	1,458	2,363	3,174

60. Many cases of detected forest offences were let off with a warning by the Divisional Forest Officer on account of their triviality or because the offenders were minors, or because it was a first offence : the following statement gives the score of these warning cases :—

No.	Division.	Disposal of offences.				Total.
		Prosecuted.	Compounded.	Warned.	Offenders undetected.	
1	East Khándesh ...	150	146	351	49	696
2	West Khándesh ...	88	221	56	143	508
3	Násik	62	271	921	164	1,418
4	Ahmednagar ...	272	50	2,522	130	2,974
5	Poona	302	736	1,820	362	3,220
6	Sátára	767	10	2,894	491	4,162
7	Sholápur ...	75	24	1,785	16	1,900
	Total ...	1,716	1,458	10,349	1,355	14,878

In the Poona division the figures include 29 cases which were time-barred under the six weeks' rule referred to in paragraph 75 of last year's report: 86 such cases escaped in the year preceding. The classification of the present 29 is as under :—

(*a*)	Injury to forest by fire ...	1
(*b*)	Illicit cuttings ...	8
(*c*)	Cattle-trespass ...	19
(*d*)	Other offences ...	1
	Total ...	29

A clasification of all the warned cases reads thus :—

No.	Division.	Classification of offences.				Total.
		Fires.	Illicit cuttings.	Cattle-trespass.	Other offences.	
1	East Khándesh ...	...	18	274	59	351
2	West Khándesh ...	2	4	6	44	56
3	Násik	1	81	826	13	921
4	Ahmednagar ...	...	54	2,466	2	2,522
5	Poona	8	168	1,628	16	1,820
6	Sátára	23	126	2,682	63	2,894
7	Sholápur	...	...	1,785	...	1,785
	Total ...	34	454	9,667	197	10,349

61. It will be seen from the returns given above that the total number of offences detected is 14,878 against 13,201 of the year before, the tale is not a heavy one considering that it concerns a forest area of 6,317 square miles spread over 38,390 square miles of country included in 7 divisions; the percentage of prosecutions on the detected cases is 11·5. Forest crime is practically confined to illicit grazing, petty thefts and firing forests through culpable negligence in the use of fire. The score of serious cases of stealing timber during the year does not run into double figures.

The Collector of Khándesh in forwarding the Administration Reports of the East and West Khándesh divisions remarks on the head of forest offences with reference to the former, "Prosecutions have more than doubled. But the number is still not large for such an extensive forest area:" and with reference to the latter, "Prosecutions increased slightly, but are still decidedly small in proportion to the area of Forests:" and so it is everywhere. Illicit grazing is the habit of the country, and the Forest Department does not suffer more under this evil than the private owners and occupiers of land do.

Protection from Fire.

62. The results of "Fire Conservancy" compared with those of the year preceding are exhibited in the statement :—

No.	Division.	Forest area placed under protection against fire in Acres.		Acreage burned.		Percentage burned.		Expenditure incurred in Rupees.	
		1893-94.	1894-95.	1893-94.	1894-95.	1893-94.	1894-95.	1893-94.	1894-95.
								Rs.	Rs.
1	East Khándesh ...	5,19,285	5,19,145	15,611	44,544	3·0	8·5	300	93
2	West Khándesh ...	11,03,502	11,03,953	89,735	1,38,981	8·1	12·5	1,036	769
3	Násik	8,18,701	8,18,975	5,141	8,119	0·6	0·9	97	216
4	Ahmednagar ...	5,42,030	5,42,895	1,104	2,445	0·2	0·4	3	...
5	Poona	4,54,917	4,57,025	5,293	7,239	1·1	1·5	611	921
6	Sátára	4,25,790	4,32,034	3,927	3,635	0·9	0·8	11	37
7	Sholápur	1,78,041	1,77,910	457	413	0·2	0·2	48	...
	Total ...	40,42,266	40,51,937	1,21,328	2,05,376	3·0	5·0	2,106	2,036

63. The area traversed by fire during the year amounted to 205,376 acres or 5 per cent. of the total forest area in charge of the Forest Department against 3 per cent. of the area burnt last year. This slight difference of 2 in the percentage burnt is due to the fact that the year of this report was a drier one, and the vegetation in the forests was more inflammable in consequence. A complete report regarding every fire was drawn up and submitted to the Conservator by the Divisional Forest Officer, and thus the proceedings of all parties, who were responsible for the occurrence of forest fires, came under close scrutiny. It will thus be seen that fire conservancy management has been receiving considerable attention. Rules under Section 25 (*b*) of the Indian Forest Act have been issued during the year by which the act of kindling a fire in the vicinity of forests, without adopting adequate safeguards against its spread into forest limits, becomes a forest offence; and this will no doubt lessen the danger of forests being burnt by the careless lighting of ráb in fields adjoining forest.

64. In the East Khándesh division there occurred in all 57 different fires, one of which in the Sávda Sátpudas swept over 15,000 acres. The Divisional Forest Officer reports that the privilege-holders in these parts did not turn out in sufficient numbers to render assistance at the call of village officers and forest subordinates, and the matter is under consideration by the Collector: out of 57 cases, offenders were traced in 10, of which 8 were prosecuted and 2 compounded. The usual measures for the prevention of forest fires, *viz.*, of burning fire traces on the outer boundaries, and on the sides of high ways, and round camping grounds, were undertaken. The total expenditure incurred under this head in this division amounted to Rs. 93.

65. Ninety-five forest fires broke out in the West Khándesh Division. In 11 cases the offenders were caught and were prosecuted, and convictions followed. Almost all the ranges were visited by forest fires, and the Divisional Forest Officer thinks that the area burnt has been underestimated by the Range Forest Officers. An expenditure of Rs. 767 was incurred on fire protection.

66. In the Násik Division 69 forest fires were reported against 112 in the year preceding, the area burnt by them being 8,119 acres against 5,141 during 1893-94; and although there was a decrease in the number of fires, still one fire alone in the Kalvan range burnt 2,432 acres. Offenders were prosecuted in 7 cases, and the originator of the Kalvan fire was sentenced to 20 days' rigorous imprisonment. The usual fire precautions were adopted, and an expenditure of Rs. 216 was incurred.

67. In the ranges of Akola, Karjat and Párner of the Ahmednagar division forest fires were more prevalent than elsewhere, and although exactly the same number, 60 fires, occurred as last year, still they spread over 1,341 acres more than they did then.

68. In the Poona division the number of forest fires increased from 161 to 184. The ranges in which large areas were burnt were Haveli, Junnar and Mával. The usual precautions by burning fire-paths were taken, and prompt intimation of the occurrence of fires was given to the Revenue authorities, and to the Divisional Forest Officer, by Forest guards by means of post-cards. Offenders were detected in 22 cases, out of these 15 were prosecuted, and 7 warned. The cause of the fires in the majority of cases is due to carelessness in burning ráb in localities adjoining forests. In consequence of repeated fires in certain villages of the Junnar and Sirur ranges, warnings have been issued by the Collector and District Magistrate to the people that if such fires continue, grazing and other privileges will be suspended. The total expenditure for fire protection amounted to Rs. 921.

69. A smaller area has been burnt in the Sátára division: 91 fires occurred against 117 of last year. In 27 cases offenders were discovered, of these 12 were let off with a warning as they were either small boys or old women, and 15 prosecutions were instituted, at the end of the year 9 convictions and 3 acquittals were recorded leaving 3 cases pending; 168 miles of fire traces were burnt by Forest Guards.

70. In the Sholápur division there were 16 forest fires in all against 14 in the year before, and although there were two fires more than the previous year, still the area burnt was less; of these 16 fires no less than 6 occurred along the Railway lines caused by sparks or burning substances thrown from trains, and 2 by sudden wind springing up while fire tracing was being done. In one case an offender was caught, prosecuted and convicted; and in seven the origin could not be traced. No expenditure was incurred under *A. VIII. f* in this division.

71. The Collector of Khándesh in forwarding the Administration Report of the East Khándesh Division remarks :—

"The figures given for forest fires would show that less than ten per cent. of the protected area was burnt—an estimate which, considering how much one hears of fires, would appear to be too favourable :"

and in forwarding that of the West Khándesh Division he writes :—

"As regards protection of forests from fire it does not seem that things are improving. The whole subject is a very difficult and disheartening one. In the case of some jungle that is burnt from end to end regularly every year the experiment might be tried of setting fire to it in half a dozen places early in the season when the greater part of the grass is still too damp to burn and letting the fire spread as it chooses. If a sufficiently early date were chosen the fire might then run only along the ridges where the grass was short and dry : the longer coarser grass in the intervening valleys might not catch fire : if this were so, then the different valleys would thenceforth be separated from each other by these natural fire traces, so that if later in the season one or more valleys did catch fire the chances of the fire spreading to the others would be reduced. I propose this only for some forest that consists of a series of valleys : and a forest that is morally certain to be burnt in the course of the year whether we set fire to it or not. If a forest is destined to take fire in any case it seems better that it should take fire at that season when the fire can do least harm."

72. The Collector of Ahmednagar in forwarding the report remarks :—

"Notwithstanding the increase in area burnt it bears a very insignificant proportion to the total forest area protected and the results cannot be called very unsatisfactory if any reliance can be placed on the estimate."

73. The Collector of Poona in forwarding the Divisional Forest Officer's report remarks :—

"The increase in fires is to be deplored, but most of them apparently were accidental. Formerly they were in very many cases intentional, and there is every reason to hope that gradually the cultivators will learn to be more careful in their ráb-burning."

(3).—Regulation of Grazing and Protection from Cattle.

74. Grazing arrangements were the same as last year, *viz.*, regulated under the rules published by Government in their Resolution No. 3595, dated 23rd May 1890, in the Revenue Department; and the following statement shows the areas closed and open to grazing during the year in the several divisions of the Central Circle :—

No.	Division.	Closed.	Open.	Total.
		Sq. m.	Sq. m.	Sq. m.
1	East Khándesh	60	747	807
2	West Khándesh	363	1,359	1,722
3	Násik	553	727	1,280
4	Ahmednagar	294	553	847
5	Poona	367	344	711
6	Sátára	143	529	672
7	Sholápur	171	107	278
	Total ...	1,951	4,366	6,317

75. The number of cattle impounded for trespassing in closed forest reservations and for grazing in open forests without passes was 337,918 against 294,769 in the year preceding, and the following statement shows the different

kinds of such cattle and how many were taken from the open and from the closed forests respectively :—

No.	Division.	Kind of Forest area.	Cows and Bullocks.	Buffaloes.	Camels.	Horses.	Asses.	Sheep.	Goats.	Total from	
										Closed area.	Open area.
1	East Khándesh	Closed ...	5,083	1,178	...	26	...	8	940	7,235	...
		Open ...	1,425	231	...	27	...	231	2,625	...	4,539
2	West Khándesh... ...	Closed ...	15,237	1,980	...	167	...	2,572	2,922	22,898	...
		Open ...	1,985	403	...	51	...	1,517	1,857	...	5,813
3	Násik	Closed ...	14,065	1,000	...	69	51	7,885	6,183	30,123	...
		Open ...	5,037	565	...	100	16	7,251	9,136	...	23,005
4	Ahmednagar	Closed ...	29,764	6,057	16	451	148	13,802	13,932	64,170	...
		Open ...	10,420	985	...	78	17	11,721	10,246	...	33,467
5	Poona	Closed ...	15,473	1,137	2	213	110	16,371	7,887	41,193	...
		Open ...	5,271	314	1	112	12	8,261	6,647	...	20,618
6	Sátára	Closed ...	11,998	1,255	...	59	41	13,547	3,570	30,470	...
		Open ...	5,967	1,168	...	30	46	11,471	3,736	...	22,418
7	Sholápur...	Closed ...	10,807	1,338	13	112	95	4,634	3,428	26,427	...
		Open ...	3,610	307	...	21	...	811	793	...	5,542
	Total ...	Closed ...	109,327	13,945	31	1,107	445	68,819	38,842	222,516	...
		Open ...	34,615	3,973	1	419	91	41,263	35,040	...	115,402
	Grand Total closed and open	..	143,942	17,918	32	1,526	536	100,082	73,882	337,918	

76. It will be seen that out of the total number impounded 100,082 were sheep and 73,882 goats, or more than one-half were sheep and goats, while all other different kinds of cattle were 163,954 in number.

77. In the East Khándesh division there has been some reduction in the total number of animals impounded, and this is the more noticeable in the case of closed forests ; while in the West Khándesh division on the other hand there has been an increase in impoundings from closed forests ; and the Divisional Forest Officer states in support of this increase that while inspecting certain forests in the cold weather he found that illicit grazing had been prevalent in closed forests, and the attention of the Range Forest Officers was particularly drawn to this matter. However the total impoundings cannot be considered excessive in view of the large forest area of this division.

The Collector of Khándesh in forwarding the report remarks :—

"Impoundings increased considerably. It would appear that the people, tempted by the numerical weakness, or perhaps the temporary slackness of the Forest establishment, had driven their cattle into the closed forests in larger numbers, hoping to escape the penalty. The cure for this would appear to be the one the Forest Department adopted, *viz.*, more rigorous impoundings, which will show the people that the chances of their suffering for their infringement of the law are greater than they supposed and will thus reduce the temptation to infringe.

78. There is an increase in the number of cattle impounded in the Násik division. Sheep and goats have been allowed to graze in certain villages in every táluka, and the Divisional Forest Officer reports that goats especially should be prohibited everywhere, as they are preventing the reboisement of the barren areas they frequent, and they spoil the pasture for horned cattle. The Collector, in forwarding the Divisional Administration Report, remarks with reference to this subject :—

"In this district, save in Nándgaon, there is no system. All seem agreed that the present closures are unsatisfactory. Excluding Peint, in this district, only one-half the area is open to grazing instead of at least three-quarters, that means that one-half the present closed area should be open. The Conservator has made proposals, which, I hope, will mend matters. I am not prepared to concur with the view that "goats should be prohibited *everywhere*." In the East goats, able to pick up a living easily, have ever been valuable to the poor. They furnish the children's milk and the only meat available. I can endorse Mr. Hight's pregnant observation in speaking of the reboisement that is apparent when he concludes that this modern growth is 'owing *not* to closures, for I see no difference between closed lands and open ones, but to the stoppage of cuttings.' It is the light axe and the curved knife that do the chief damage, and the cultivators' cattle require exclusion only from defined areas such as recent coupes, kurans and so forth."

In respect of the Collector's remark that there is no system of closed and open forest, save in Nandgaon, it must be explained that the proportion of forest to be closed and to be open to grazing in the forest of every village in the Násik district, was determined by Mr. Frost, I. C. S., when Forest Settlement Officer of Násik, who fixed not only the particular portion of each forest to be open and to be closed respectively, but also prescribed the period for which the closure should run.

These proposals were approved by the then Collector of Násik, by the Commissioner of the Division, and by Government, who sanctioned their adoption. In the Nándgaon Táluka working-plans have been applied since by the Forest Department to the forest areas, and the original scheme of open and close forest has been revised by the Forest officers, so that closure against cattle is applied with regard to requirements of forestry, and in consequence a larger area has been opened to grazing than was done under the Forest Settlement Officer's method of closing half and opening half the forest area of each village, as working-plans are extended to other ranges so will the grazing arrangements be revised concurrently.

79. There has been a slight increase in the total number of impoundings in the Ahmednagar division which calls for no special explanation; but out of the total number of impounded animals 25,523 were sheep and 24,178 were goats, or more than half were sheep and goats.

80. In the Poona division the grazing rules were the same as last year. There was an increase of 10,110 in the number of cattle impounded, and the Divisional Forest Officer states that the Forest subordinates have been more active than usual in protecting the forests against trespassing cattle in the closed and open areas. The Collector of Poona remarks:—

"The increase in the number of the impounded cattle is due to increased vigilance on the part of the Forest guards, and the increase in the receipts is due partly to the increase in the number of the impounded cattle and partly to the raising of the pound fees on goats.

"It may be noted, however, that the provisions of the Act have been largely resorted to by private persons, which shows that it is really wanted, and the large impoundings by the Forest Department are only the natural results of the carelessness of the people."

81. The total impoundings in the Sátára division show a very slight decrease viz., of 83, when compared with those of the year before. The Divisional Forest Officer reports that the village officers were apathetic in the collection of grazing fees during 1892-93 and 1893-94, and consequently Government were losing a part of their legitimate revenue. The Collector thereon ordered that the Forest officers should collect fees for cattle found in forests where village officers had failed to do so, and the result of this order was that Rs. 11,051 were collected during 1894-95 against Rs. 5,694 in the year before. But this order has been cancelled by the Commissioner, Central Division, who suggests

"that the performance of their duties regarding the issue of permits should be exacted with greater stringency from village officers. If permits are to be issued by Forest officers without impounding the animals, no one will take out permits in the hope of getting off payment altogether. Village officers must be taught to see that necessary permits are issued in due time before the grazing season opens or that they will suffer in pocket instead of gaining."

The Collector of Sátára has remarked in his administration Report

"that the cancellation of the order above referred to will probably lead to a further diminution of revenue,"

and in forwarding the Divisional Forest Administration Report he writes:—

"I do not altogether agree with him (Mr. Fagan) about the much canvassed question of the grazing rules, and I have felt myself obliged recently to cancel an order of my predecessor's, which Mr. Fagan much approved of, but his discussion of a proposed change is always temperate and reasonable, and if the change is resolved on though he may not like it, he carries it out loyally."

82. There has been an increase in the number of cattle impounded in the Sholápur division also, the assigned reason being that Forest subordinates were more vigilant and active than before.

83. The following statement shows the number of cattle impounded by people themselves for trespassing on their private lands during the revenue year

and those impounded by the Forest Department during the Forest year 1894-95, the Revenue year coinciding with the Forest year :—

No.	Division.	Number of Cattle impounded by people.	Number of Cattle impounded by Forest Department.
1	East Khándesh	235,442	40,485
2	West Khándesh		
3	Násik	87,105	53,128
4	Ahmednagar	61,127	97,637
5	Poona	57,252	61,811
6	Sátára	38,762	52,888
7	Sholápur	27,950	31,969
	Total ...	507,638	337,918

84. Fences, consisting of crown branches of the felled trees, have been erected round Forest reserves under reboisement, such as exploited coupes, plantations, &c., for keeping out cattle ; and wire fencing has also been put up round some selected reserves, the material required having been purchased in the local market. The following are the details of the wire fence erected:—

No.	Division.	Quantity of Wire, Staples, &c., purchased.		Expenditure incurred.	Length of Fence erected.	Remarks.
		Wire.	Staples.			
		Cwt.	Cwt. qr. lbs.	Rs. a. p.	M. ft.	
1	East Khándesh ...	487	1 2 0	2,965	3 2,640	
2	West Khándesh ...	90	2 0 26	1,888	4 2,640	
3	Násik	...	...	52	1 4,560	The wire in stock was used.
4	Ahmednagar ...	...	...	668	2 3,960	Do. do.
5	Poona	40	2 0 0	2,128	8 165	
6	Sátára	60	0 2 2	733	0 4,663	
7	Sholápur	28	No. 27,000	1,300	7 2,221	
	Total ...	705	6 1 0 No. 27,000	9,734	28 5,009	

(*c*).—Improvement of Forest Growth.

(*1*).—*Natural Reproduction.*

85. Given a seasonable rainfall, the measures required to be taken to ensure or improve the natural reproduction in the forests may be described as—

(*a*) the prevention of forest fires,

(*b*) the exclusion of harmful grazing,

(*c*) protection against illicit and irregular cuttings,

(*d*) improvement fellings and removals.

Seeing that considerable attention has been given in years past, and is being given at present, to these important factors of efficient forest conservancy, natural production has been satisfactory on the whole, and is as good as can be expected where the above conditions are observed.

86. In the East Khándesh division the rains held off early in the season, but later on they were profuse, and the Divisional Forest Officer reports favourably on natural reproduction, and remarks :—

"After ascending the main range of the Sátpudás near Panch-pándav in the Yával range a long stretch of wild country alternating with grassy plains and ravines clothed with dense forests, abruptly opens to the view of the spectator. This part of the Sátpuda forests, owing to its comparative inaccessibility from the markets in Sávda and Yával, appears to have enjoyed immunity from the frequent application of the axe of the privilege holders, and these forests are consequently stocked with good and valuable timber."

87. The Divisional Forest Officer of West Khándesh states "that the reproduction of teak in the Sátpudás is very fair, though hampered in all directions by forest fires, while the reproduction of teak and Anjan (Hardwickia) from the stools of the departmentally felled trees is, as a rule, excellent."

88. Mr. G. A. Hight, Deputy Conservator of Forests and Divisional Forest Officer of Násik, before leaving the country on the 25th March 1895, on special leave with a view to retirement from the service, left the following note with reference to the improvement of forest growth :—

"After having been away from the Deccan for about 15 years, I cannot help remarking a great improvement in the growth from what it was in the neighbouring district of Ahmednagar in 1878-79. One can no longer speak of absolutely bare hills containing nothing, but Euphorbia as a characteristic feature of the scenery in the Deccan. Almost everywhere growth has sprung up pretty thickly, and particularly in the Eastern part of the district, the beautiful and valuable Anjan is now very common. It may be that Násik was originally better wooded than Ahmednagar, still the trees have all the appearance of having grown in the last 15 years, owing not to closures, for I see no difference between closed lands and open ones, but to the stopping of cuttings."

This opinion is, of course, deserving of great respect, but the Conservator does not admit that closure against cattle has been so ineffective during the past fifteen years, and that the presence of young timber in the Násik reserves is owing entirely to the prevention of cutting and felling. If cattle had not been excluded to the extent they have been, the reboisement which Mr. Hight noticed would not have been anything approaching to what it is, and the Conservator states this unhesitatingly after 25 years' continued personal experience of the Deccan hills, and the working of forest conservancy management. Not only in the Násik district, but in every other district the advancing growth of timber is marked and conspicuous in places, but there are areas where the improvement has been so very slow as not to be noticeable readily by any person other than a Forest Officer experienced in the reboisement of denuded and degraded hill and other lands; and over-grazing is the cause of this slow progress.

89. In the exploited coupes of past seasons which have been closed and protected efficiently reproduction from the stools of the felled and removed trees is very vigorous and promising.

(2).—*Artificial Reproduction.*

90. Artificial plantations are required to be undertaken in respect of considerable tracts of denuded lands, where there are no trees, or an insufficient number of trees, to shed seeds and to cause natural reproduction under the bountiful provisions of Nature. The usual systems of artificial plantations, *viz.*, of raising seedlings in nurseries, of irrigated plantations, of ploughing the ground, dibbling and broadcasting were followed during the year, and the results have been as profitable as could be expected.

91. In the two divisions of Khándesh rains held off for a considerable time at the commencement of the season, and the late rains consequently retarded, to some extent, the planting and sowing operations. 1,725 acres were treated under the above methods in the Eastern division at a cost of Rs. 285, and 310 acres in the Western division at Rs. 1,239.

92. Cultural operations were undertaken in 3,422 acres including the area of coupes planted up, in the Násik division, and the total expenditure amounted

to Rs. 1,739. The Nándgaon range heads the list with 2,038 acres planted up. 10 acres were added to the Páthardi plantation in the Násik range.

93. In the Ahmednagar division 9,076 acres were treated in the usual manner, and the plantations at Dongargan and Hanmantgaon were kept up. The results on the whole were satisfactory. Sind Bábool seed planted during the year germinated freely. The total expenditure amounted to Rs. 1,575.

94. In the divisions of Poona, Sátára and Sholápur the usual systems were followed in sowing seeds, &c., and the results are, on the whole, satisfactory. Form No. 56 gives the details of all the works undertaken.

(3).—Early Thinnings.

95. No such operations were undertaken during the year.

(4).—Other Operations for the improvement of Growing Stock.

96. In the East Khándesh division the creeper known as the Pirul-veil belonging to the natural order Combretaciœ which thrives in black soil and climbing up trees spreads all over them in the Bábool forests, doing much damage, and even killing the trees, was cut down systematically, in Bhusával and Edlábád ranges. Salai (Boswellia) trees, where they are densely growing so as to suppress other and more valuable kinds, are also being cut out.

97. In the West Khándesh division considerable creeper cutting has taken place.

98. In the Násik division prickly-pear was eradicated from forest reserves of Niphád, Chandvad, Bágláṇ and Kalvan ranges, and 297 acres were thus cleared of this noxious growth.

99. In the Ahmednagar division 264 acres of forest area were cleared of prickly-pear, and the Forest guards removed and destroyed 2,143 cart-loads of this weed, with their own hands.

100. In the Poona division the cutting of creepers was carried on by Forest guards in the heavier forests on the Ghâts, free of cost, while the work of eradicating prickly-pear from Bábool reserves was carried on by hired labour and 46 acres were cleared.

101. Considerable cutting of prickly-pear and of creepers was undertaken in the Sátára division to improve the growing stock, and an expenditure of Rs. 1,637 was incurred on these operations.

102. In the Sholápur division 56,100 square feet were cleared of prickly-pear by paid labour, and in addition to this 3,900 cart-loads were destroyed by Beat guards.

(5).—Experiments.

103. The following kinds of seeds were obtained in small quantities from the Andaman Islands and from other parts and were distributed among the several divisions for experimental sowing :—

Lagerstrœmia parviflora,
Pterocarpus indicus,
Albezzia lebbek,
Pinus khasia,
Swietenia mairophylla,
Cupressus torulosa.
Sind Bábool;
Bambusa arundinacea.

but some of the seeds were not received up to the end of May 1895, and consequently had not germinated at the end of the year. The Sind Bábool seed has germinated freely. Pinus khasia planted in the Donza forests of the Poona division has grown to a height of 3 feet. Lagerstrœmia has only germinated in Násik, 2,000 seedlings of Bambusa arundinacea have been reared and transplanted into the Teak coupes in the Poona division. Experiment in coffee planting is being carried on at Lingmala in the Sátára division, and the plants are healthy

(*d*).—Exploitation of Major Forest Produce.

(1).—*Clear or Regeneration Fellings.*

104. In the East Khándesh division clear fellings of bábul were made in the coupes of the season in the Trans-Purna reserves over an area of 90 acres, and further a felling of 500 khandis of bábool fuel was made in Reoti forests in Bhusával, standing stock in 2,048 acres of disforested lands in Chálisgaon was disposed of by sale, and a clearance of 813 acres was effected at Virwada in the Chopda range in the disforested lands at the foot of Sátpudas, 13,000 teak trees were cleared from revenue waste and málki lands in Jámner range.

105. The only clear felling made in the West Khándesh division was at Ubhand in the Nizampur range where 200,000 cubic feet of Khair and inferior firewood were cut and the coupes afterwards sown up with seeds.

106. No clear fellings properly so called were undertaken in the Násik division, but the first growth of wood in occupied numbers outside of forest boundaries has been sold to contractors in the ranges of Peint, Násik and Báglán, and the teak in certain occupied numbers was sold to the occupants. The total number of trees is given at 226,547.

107. In the Ahmednagar division clear fellings were confined to bábool reserves. The whole material of a coupe is sold on foot to purchasers for felling and removing all the growth, so that it can then be sown with seeds. 80,067 cubic feet of timber were thus removed. In like manner in the divisions of Poona, Sátára and Sholápur the bábool coupes only were subjected to this process of felling.

(2).—*Selection Fellings.*

108. No selection fellings were undertaken in this Circle except in the Násik division, where one hundred khandis of Tivas (Ougeinia dalbergioides) were sold to a purchaser at Rs. 11-2-0 per khandi, the trees to be felled being marked by the Range Forest Officer, Peint.

(3).—*Improvement Fellings and* (4).—*Coppice Fellings.*

109. Improvement fellings on the system of coppice with standards which are made in the interests of existing crop were undertaken in the coupes worked on a rotation of 40 years. Under this system up to 40 sound teak trees, and where sound ones cannot be found unsound ones are reserved per acre, or one tree per guntha. In addition to this, all young trees less than one foot in girth at breast height from the ground and all mango, hirda, shikakái, and other valuable trees are reserved, the remaining unsound and crooked ones being cut and removed.

(5).—*Unregulated Fellings.*

110. Under this head can be classed the exploitations of timber, firewood, bamboos and other forest produce from the Sátpuda forests by the Bhil privilege-holders in the two divisions of Khándesh, and fellings made to supply free grants and to clear boundary lines also come under this head.

(*e*).—Extraction and transport of Major Forest Produce by Land and Water.

111. The timber and firewood cut departmentally are stacked either inside or outside the forest limits generally accessible to carts, and when sold are removed by purchasers in the same way as material sold standing is removed. The material is generally removed in carts where cart tracks offer, and they are to be found in almost all directions; sometimes timber is dragged by bullocks where carts cannot go. The Railways are also made use of where they may present the cheaper and quicker mode of transport. Water carriage is only available in parts of Khándesh and Sátára divisions.

(*f*).—Exploitation of Minor Forest Produce.

(1).—*Extraction of Fodder.*

112. Grass is exploited by hand from certain closed forests called "valuable kurans," the right to cut grass being sold by auction, and also on permits issued on payment of fees. The same means that are used for removing timber, &c., are utilised for the conveyance of grass.

113. The following statement shows the area from which grass was removed by hand and the amount realised :—

No.	Division.	Area.	Amount.
		Acres.	Rs.
1	East Khándesh ...	20,234	18,299
2	West Khándesh ...	20,827	9,590
3	Násik	35,241	21,383
4	Ahmednagar	89,684	3,866
5	Poona	16,436	4,815
6	Sátára	10,765	4,645
7	Sholápur	28,800	5,410
	Total ...	221,987	68,008

In the East Khándesh Division 19,120 cart-loads of grass valued at Rs. 2,390 were removed from the forests on permits. And in the West Khándesh division 18,395 cart-loads, 1,607 head-loads, 655 bullock-loads and 51 donkey-loads were removed on payment of fees amounting to Rs. 2,570. In the Násik division 440 cart-loads and 171,250 bundles of grass were removed and the amount realised was Rs. 423.

In the Ahmednagar division an area of 4,569 acres, the grass on which is valued at Rs. 7,163, was made over to the Commissariat Department and the Remount Department, for the cutting and removal of grass, free of charge.

In the Poona division the grass on 7,586 acres of reserved forests situated in the vicinity of Poona, and on 4,111 acres in Khed, Mulshi and Mával ranges and yielding grass valued at Rs. 17,000, was placed at the disposal of the Commissariat Department, without any credit being shown in the accounts of the Forest Department.

(2).—Grazing.

114. There was no change in the methods of grazing as reported last year; and the following statement shows the number of cattle of different kinds which grazed in the forests during the year :—

No.	Division.	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.	Total.
1	East Khándesh ...	26,113	142,913	77,658	...	1,111	247,795
2	West Khándesh ...	18,773	167,011	22,864	...	6,868	215,516
3	Násik	12,152	184,822	37,705	...	361	235,040
4	Ahmednagar ...	4,955	110,651	59,012	...	496	175,114
5	Poona	19,006	120,826	80,667	...	93	220,592
6	Sátára	32,583	158,931	47,688	...	9	239,211
7	Sholápur	1,792	34,248	...	...	36	36,076
	Total ...	115,374	919,402	325,594	...	8,974	1,369,344

And the following of the above numbers respectively enjoyed free grazing :—

No.	Division.	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.	Total.
1	East Khándesh ...	1,899	8,960	...	...	76	10,935
2	West Khándesh ...	2,327	22,537	144	...	399	25,407
3	Násik	2,328	74,245	500	...	...	77,073
4	Ahmednagar ...	128	6,596	...	...	...	6,724
5	Poona	15,989	95,007	...	...	...	110,996
6	Sátára	28,240	141,218	...	...	...	169,458
7	Sholápur	468	8,485	...	...	...	8,953
	Total ...	51,379	357,048	644	...	475	409,546

115. The grass and grazing receipts in the several divisions during the year are compared with those of the year preceding in the table below :—

No.	Division.	1893-94.	1894-95.
		Rs.	Rs.
1	East Khándesh	77,183	86,411
2	West Khándesh	112,709	104,621
3	Násik...	54,970	62,525
4	Ahmednagar	40,717	41,583
5	Poona...	44,322	45,243
6	Sátára	28,864	34,559
7	Sholápur	27,446	27,256
	Total ...	386,211	402,198

116. In all the divisions, except West Khándesh and Sholápur, there is an increase in the revenue from the sale of grass and grazing. The decrease in the latter division is insignificant, while in the former it amounts to Rs. 8,088, and the Divisional Forest Officer states in explanation of this decrease that if the rainfall is early, large collections are made in June, and if the rains are late or scanty the June grazing fees are very small.

117. The cattle census of the different Collectorates comprising the Central Circle is as under :—

No.	Collectorate.	Cows and Bullocks.	Buffaloes.	Horses.	Asses and Mules.	Sheep.	Goats.	Camels.	Elephants.	Total.
1	Khándesh ...	749,449	197,491	25,951	7,767	36,444	213,984	10	...	1,231,096
2	Násik	491,250	74,570	16,485	3,090	117,912	141,642	...	...	844,949
3	Ahmednagar ...	691,703	62,313	26,803	8,477	297,659	208,514	4	...	1,295,473
4	Poona	522,607	76,382	14,344	6,706	228,591	132,895	22	...	981,547
5	Sátára... ...	545,942	167,004	15,393	3,167	348,948	135,169	...	...	1,215,623
6	Sholápur ...	455,806	68,300	13,081	3,928	223,137	121,659	...	...	885,911
	Total ...	3,456,757	646,060	112,057	33,135	1,252,691	953,863	36	...	6,454,599

(3).—*Miscellaneous Produce.*

118. Hirda, the fruit of the Terminalia chebula, constitutes the main item of the miscellaneous products that are exploited for sale from the forests of the Central Circle, while shikakái, the pod of Acacia concinna, Tarwad, the bark of Cassia auriculata, the leaves of Apta, Bauhinia racemosa, and Tembhurni, Diospyros melanoxylon, are also exploited for sale, but to a lesser degree. In like manner flowers, fruits, honey, wax, surface soil, rock and minerals, reeds, oil, &c., come under this head.

119. There are no Hirdas in the two divisions of Khándesh, but the Roshá grass (Andropogon schœnanthus), the right of distilling oil from which is sold by auction, forms the main part of the minor products, and Rs. 534 and Rs. 16,339 were realised in the Eastern and Western divisions respectively. Twenty-four cart-loads of green stones, which are used by lapidaries in Bombay, were extracted from the forests of the Chálisgaon range in the Eastern Division by a contractor for Rs. 144.

120. In the Násik division the Roshá grass produced Rs. 1,500, and the leaves of Apta and Tembhurni Rs. 1,424, while 13 deshi khandis, 7 maunds, 3 pailis and 3 sers of collected Hirda nuts were sold.

121. In the Ahmednagar division 32 deshi khandis and 9 pailis of Hirdas were collected departmentally and sold for Rs. 1,762, and some other minor forest products fetched Rs. 1,422.

122. The collection of Hirda under the share system in the Poona division realised Rs. 938. 205 khandis, 26 maunds and 6 lbs. were collected, but owing to dull Hirda market 134 khandis in the ranges of Mulshi, Haveli and Mával were not sold. Revenue from other minor products amounted to Rs. 1,772.

123. The departmental collection of hirda in the Sátára division was not so large as last year, the crop having been considerably damaged by heavy rain in October and November 1894. 775 khandis, 2 maunds and 24 lbs. were collected at a cost of Rs. 5,631 and realised Rs. 12,799. Shikakái produced Rs. 800 and all other minor products, as per Form No. 58, produced Rs. 995.

124. In the Sholápur division earth and stones, and fruit, and Shindi leaves were the only articles of minor forest produce which were sold.

CHAPTER III.

GROSS YIELD AND OUTTURN OF FOREST PRODUCE.

I.—DEPARTMENTAL OPERATIONS.

(*a*).—TIMBER.

125. A comparative statement of the timber exploited departmentally from the forests with the cost of the operations and the revenue realized therefrom for the two years offers the following differences :—

Division.	1893-94.			1894-95.		
	Timber in Cubic feet.	Cost.	Receipts.	Timber in Cubic feet.	Cost.	Receipts.
		Rs.	Rs.		Rs.	Rs.
East Khándesh	16,045	1,158	12,760	15,997	1,031	8,644
West Khándesh	141,608	4,195	72,454	142,386	4,130	61,538
Násik	11,802	115	754	...	...	156
Ahmednagar	42,705	976	6,806	41,760	1,063	5,648
Poona	15,818	558	3,172	92,965	3,475	7,489
Sátára	19,132	1,470	14,084	21,586	2,123	15,174
Sholápur	...	...	...	...	...	...
Total ...	247,110	8,472	1,10,030	3,14,694	11,822	98,649

Departmental operations in the East Khándesh division were carried out to a smaller extent, and the selling rate of teak poles was about 8 per cent. lower than last year.

In the West Khándesh division 142,386 teak pieces of timber were exploited from the forests of seven ranges; and 39,145 remained in stock unsold in the Akráni and Shirpur ranges at the end of the year.

The only work undertaken in the Násik division was the felling of timber on forest boundary lines, the cost being charged to demarcation, and the revenue realized, Rs. 156, is on account of the sale-proceeds of 4,860 cubic feet of balance from last year.

2,350 teak pieces and 1,091 Jámbhul rafters were taken for use as posts for wire fencing compartments in the Ahmednagar forests.

Of the teak timber felled in the Haveli range 9,143 pieces found no purchasers; and a considerable quantity of timber was used for wire fencing in the Poona division.

From the forests of 13 ranges of the Sátára division 21,586 cubic feet of timber were brought to depôt at a cost of Rs. 2,123, and with the balance in stock from last year of 1,126 cubic feet were offered for sale, 22,659 cubic feet being disposed of, and 53 cubic feet being left.

2,146 trees yielding 3,916 posts were felled and brought out of the Sholápur forests for use for wire fencing reserved forests.